

Occupational health and safety

Mitsui Kinzoku Group holds that occupational health and safety is essential for business continuity.

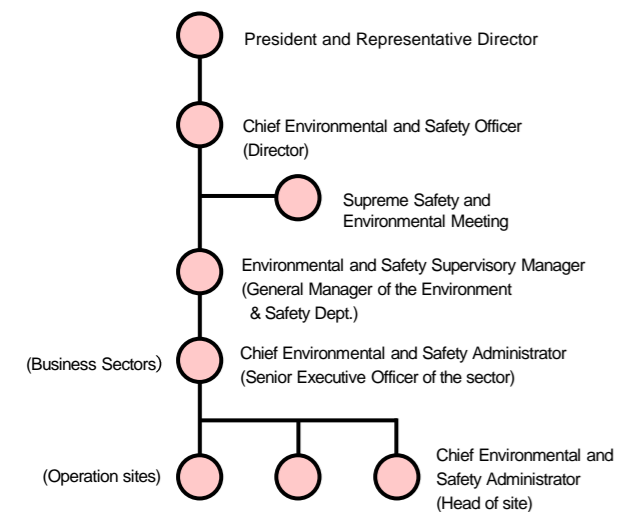
We provide a safe worksite environment not only for our employees but also for cooperative companies, contractors, and visitors to plants.

We are also improving occupational health and safety initiatives, including global implementation of initiatives, and reinforcing measures in line with the Mitsui Kinzoku human resources system reform.

Policy and management system

Mitsui Kinzoku Group is committed to creating a safe and comfortable work environment. This is based on our Basic Policy on Health and Safety, in which it states that “ensuring the health and safety of all people working for Mitsui Kinzoku Group is the most important element for conducting business activities.” We also believe that the development of a corporate culture that places health and safety first will lead to increasing productivity and reducing operational and business risks, and even to strengthening our relationship of trust with employees and solidifying our business foundation in the medium to long term.

Environmental and Safety Management System



Health and safety management system

All major sites of Mitsui Kinzoku Group manage occupational health and safety in accordance with ISO 45001. For small-sized sites, we developed an internal certification system. At each site we work to realize an upward spiral motion by going through the PDCA cycle in accordance with the management system. Improvements to the issues identified by the review are incorporated into measures such as risk assessments and health and safety training.

Safety audit

We implement periodic internal safety audits to confirm the operational situation of the management system at each site. The internal safety auditing body checks for compliance with laws and regulations as well as the Mitsui Kinzoku Group's voluntary standards, in addition to pointing out hazardous places and following up on improvements made.

In areas with travel restrictions due to COVID-19, we implement safety audits in a remote format using ICT. Details that cannot be verified remotely are intensively checked during onsite inspections after the travel restrictions are lifted.



Internal safety audit (at Hibi Smelter)

Health and safety training

Mitsui Kinzoku Group conducts health and safety training for employees regularly to increase their level of awareness of health and safety, ensure thorough compliance with health and safety regulations, and cultivate a corporate culture that places health and safety first.

We provide training materials in multiple languages and make them available on our corporate intranet for employees to review or reference at any time.

Health and safety training provided in FY2022

Purposes	Major training programs
Expand knowledge on health and safety across the Group (Knowledge required for each position, key initiatives in the year, good practices, latest trends)	<ul style="list-style-type: none"> New employee training Job-rank-based safety training Laws and regulations lecture Lecture by an external expert Group study session for safety and environmental experts
* Conducted remotely	
Promote compliance with safety rules and improve risk perception at manufacturing sites	<ul style="list-style-type: none"> "Kiken Yochi" activity (hazard prediction) Experiential risk training Risk assessment training Safety communication activity PPE training Emergency training (fire/earthquake)
* Conducted face-to-face	

* More information on occupational health and safety is available on our website.
<https://www.mitsui-kinzoku.com/en/csr/society/occupational/>

Accident prevention initiatives

1. Promotion of the lockout system

Occupational accidents could occur caused by human errors, such as accidentally switching on a machine whose operation has been suspended for cleanup, refueling, inspection, repair, adjustment, construction, or other work. The lockout system is a system that shuts off and locks the power source of mechanical devices to prevent occupational accidents that could occur due to erroneous operation and protects the safety of workers. At present, the system to shut off power supply is available at all manufacturing sites in Japan and overseas, and we are working on introducing the system to shut off pressure, temperature, and the flow of liquids according to specific conditions at each site. In FY2022, no safety incidents occurred due to non implementation of lockout.

2. Establishment and operation of safety standards

We are engaged in establishing the Mitsui Kinzoku Group safety standards to prevent accidents caused by improper operation of machines, equipment, and tools. Following standards for forklifts and disk grinders in FY2021, we newly formulated and introduced a standard for the use of utility knives in FY2022. Utility knives are a handy work tool commonly used at many manufacturing sites. They can, however, be dangerous when used incorrectly due to carelessness or lack of experience and cause injuries such as cut wounds. The new standard aims to prevent such injuries as well as raise safety awareness related to the tool.

To promote effective use of the standards at all domestic and overseas sites, we provide explanatory materials in Japanese, English, and Chinese. We also review the operational status of the standards through safety audits.

3. Safety initiatives for senior employees

Mitsui Kinzoku has raised the mandatory retirement age to 65 since FY2021. In addition, as the age range of our employees is expected to rise along with the aging of Japanese society, we are developing a safety management system for senior employees so that they can work safely and with peace of mind for an extended period of time.

Aging tends to reduce some physical functions, which may be a factor that increases the incidence of occupational accidents among senior employees. To prevent these accidents, we provide safety training for managers and senior employees. In addition, based on risk assessments, we worked to create a comfortable work environment by improving lighting, eliminating steps, and taking measures against heat, as well as reviewing some of the work manuals to ensure that even senior employees can operate equipment safely. We plan to pursue these activities going forward.

Initiatives for environmental issues

Mitsui Kinzoku Group recognizes the negative environmental impact of its operations as a great business risk and strives to reduce it.

Environmental management

Mitsui Kinzoku Group has established the Supreme Safety and Environmental Meeting as a place to deliberate and determine the most important matters related to safety and the environment. At this Meeting, guidelines and action plans are determined by the Chief Environmental and Safety Officer (also a director) as chairman and business line heads as members. The decisions made are then spread to each site by the Environmental and Safety Supervisory Manager (General manager of the Environment & Safety Dept.) under the direction of the Chief Environmental and Safety Officer. Each site that operates under ISO 14001 has a chief person that serves as the person responsible for managing environment and safety, and who makes sure that the required actions are being reliably executed. The Chief Environmental and Safety Officer reports to the Board of Directors on important environmental and safety issues, including the operation of the management system, and receives guidance and supervision from the Board of Directors.

The Basic Environmental Policy and the Environmental Action Plan

In 2001, Mitsui Kinzoku Group established the Basic Environmental Policy* and the Environmental Action Plan. In response to the Paris Agreement as well as the expansion of ESG investment, we revised the basic policy and the action plan in 2018, in order to strengthen our Group's efforts to address environmental issues. In the action plan, we have assessed the negative impacts of our business activities on stakeholders in our value chains and set targets for activities with significant impacts, on which we will focus our efforts to reduce their environmental footprint. We are incorporating the targets set in the Environmental Action Plan into the plans of each of our sites, and promoting activities to achieve them.

The Purpose and the Vision for 2030

In 2022, Mitsui Kinzoku Group established its Group's Purpose: We promote the well-being of the world through a spirit of exploration and diverse technologies. We aim to make life easier and greener to help address environmental and social issues around the world and build a sustainable society. Our Group's Vision for 2030, which was set based on the Philosophy and the Purpose, promotes manufacturing with low environmental impact and the construction of recycling-based services. The 22 Medium-term Management Plan, which we developed for the Vision for 2030, makes clear that each business will be evaluated from the perspective of improving our environmental and social value, including environmental impacts, and that sustainability will be considered when making business decisions.

* The Basic Environmental Policy is available on our website.
<https://www.mitsui-kinzoku.com/en/csr/environment/environmental-policy>

Outline of the Environmental Action Plan

1 Establishment and improvement of environmental management system

Establishment and improvement of environmental management system at each site according to the form and scale of business

2 Reduction of environmental footprint

- Prevention of global warming
- Effective resource utilization and waste reduction
- Reduction of emissions of environmental pollutants
- Utilization of renewable energy
- Appropriate utilization and management of water resources
- Biodiversity conservation
- Thorough management of mine & plant closure

3 Development and provision of environmental contribution products

Development of environmental contribution products and market expansion

4 Emergency measures

Preparation of well-organized emergency manuals for disasters and accidents and continuous improvements of them

5 Education/public relations/social contribution activities

- Strengthening environmental education
- Disclosure of environmental information
- Dialogue with stakeholders

(Revised in April 2018)

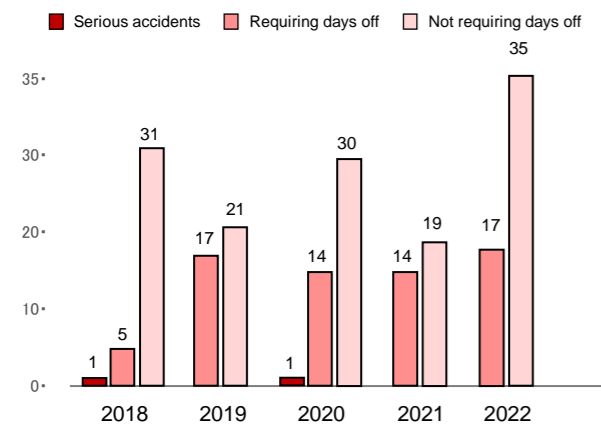
Safety performance in 2022

Excluding domestic consolidated subsidiaries, the frequency rate of accidents in each of the categories was lower than both the manufacturing average and the non-ferrous metal manufacturing average. And in each category, the severity rate of accidents was lower than the industry average.

We will continue to scrutinize and analyze the causes of the accidents and take measures to prevent recurrence.

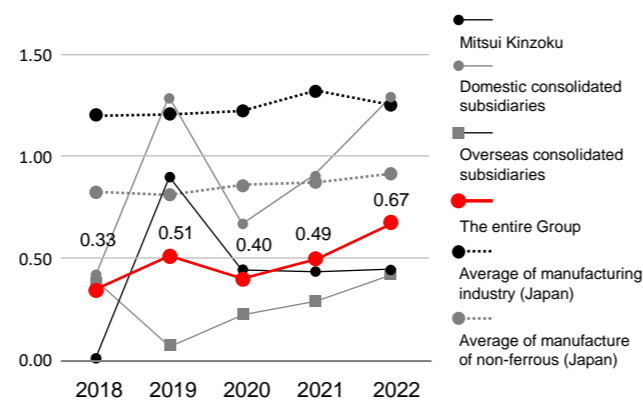
Trends in the number of accidents in sites in Japan

※ Including accidents that occurred in cooperative companies and contractors



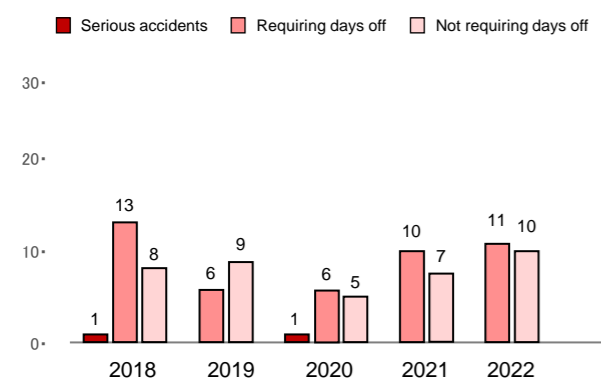
Frequency rate of accidents

※ Not including accidents that occurred in cooperative companies and contractors



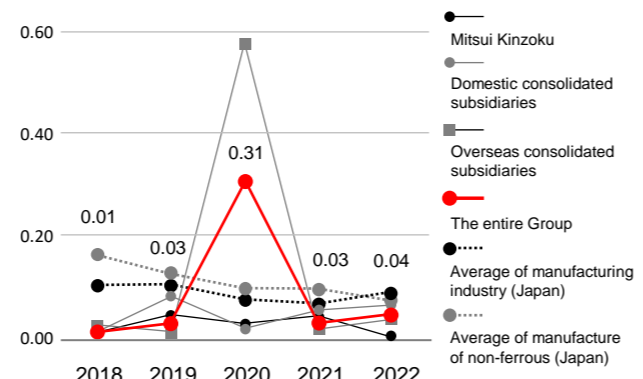
Trends in the number of accidents in overseas sites

※ Including accidents that occurred in cooperative companies and contractors



Severity rate of accidents

※ Not including accidents that occurred in cooperative companies and contractors



The values shown in the graph are for the entire Mitsui Kinzoku Group as a whole

Response to climate change

Mitsui Kinzoku Group considers climate change as an important change in our external environment which would affect the continuity of our business. As we have energy-intensive operations such as non-ferrous metal smelting and electrolytic copper foil, we are well aware of the impacts of energy consumption and greenhouse gas (GHG) emissions from business activities on climate change. In order to reduce these impacts, we have identified climate change-related issues as the materiality, including reduction of GHG emissions and energy management, and make efforts to accomplish them. In the 22 Medium-term Management Plan, we have formulated a response to climate change as a key strategy in enhancing the Group's environmental and social value.

Support for the TCFD* recommendations

We recognize that climate change and the social and economic changes surrounding it pose risks to our business. However, we also recognize that an appropriate response can lead to enhanced competitiveness and new business opportunities.

In FY2020, we started to analyze the medium- and long-term risks and opportunities posed by climate change based on the TCFD recommendations and to incorporate the results of this analysis into our business strategies. In March 2022, we also announced our support for the TCFD recommendations.

* Task Force on Climate-related Financial Disclosures

Disclosure items recommended by the TCFD are indicated with TCFD.

Governance TCFD

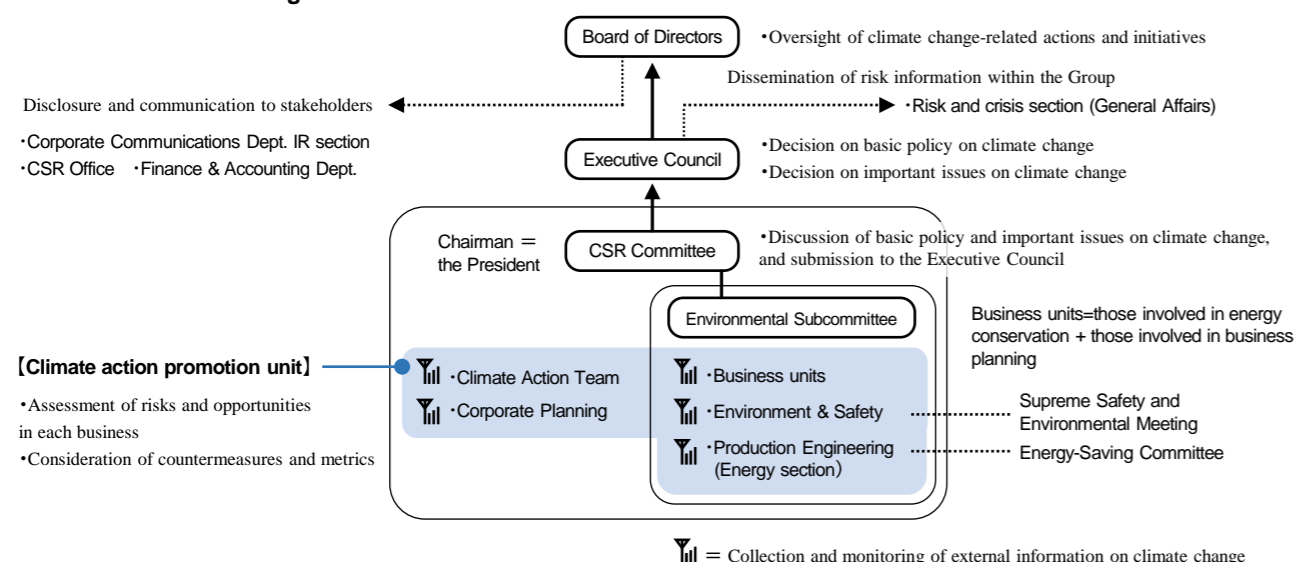
Mitsui Kinzoku Group's basic policy and important issues to address climate change are discussed by the CSR Committee, which is chaired by the President, and then deliberated and decided by the Executive Council. The Executive Council is comprised of representative directors and executive directors, deliberating from a management perspective. Decisions are reported to the Board of Directors for monitoring and oversight.

Risk management TCFD

Mitsui Kinzoku Group has multiple businesses with different business models. The Climate Action Team identifies and assesses risks and opportunities related to climate change in collaboration with each business unit, including scenario analysis, based on the findings of internal and external surveys and in accordance with the framework of the TCFD recommendations.

The results of the scenario analysis are reported to top management at the Executive Council. Each business unit is responsible for promoting countermeasures based on the results, while the Climate Action Team is tasked with monitoring the progress of the countermeasures. In line with the achievements, the team evaluates and identifies risks and opportunities afresh for the next cycle, in cooperation with the business units. By constantly implementing this risk management cycle, we formulate and promote business strategies with a view to addressing climate change.

Governance and risk management structure



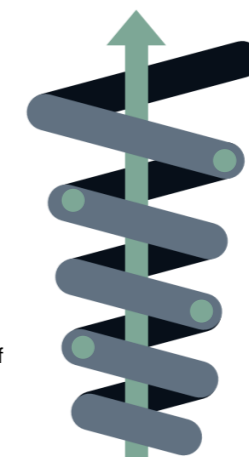
Risk Management Process / Integration of scenario analysis and business strategy

3 Review of countermeasure implementation

- Confirm the results and enhancements of the medium-term management plan and business strategies
- Review of response to physical risks

1 Identification of key risks and opportunities, and consideration of countermeasures

- Information gathering on climate change
- Business analysis and identification/assessment of risks and opportunities
- Consideration of climate-related group-wide direction and business strategies
- Consideration of group-wide direction for physical risk response



4 Review key risks and opportunities, and reconsider countermeasures

- Update climate-related information
- Review risks and opportunities
- Revise group-wide direction and business strategies as necessary
- Improve group-wide BCP

2 Implementation of countermeasures

- Incorporate countermeasures into the medium-term management plan and business strategies
- Formulate and promote group-wide BCP in response to physical risks

(Important issues at each step are determined by the Executive Council.)

Strategy/Scenario analysis TCFD

Mitsui Kinzoku Group operates many businesses globally and recognizes that climate-related risks and opportunities differ among businesses. Therefore, we conduct scenario analysis starting with businesses that are relatively likely to be affected by climate change. Specifically, we rank businesses from these perspectives: amount of CO₂ emissions, magnitude of change in the business environment due to climate change, and amount of sales. We work on scenario analysis by deepening our understanding of the climate-related risks and opportunities of the target business and focusing on the integration of analysis and business strategy.

We have completed our scenario analyses for these businesses: the metals business, which accounts for about 70% of the Group's total CO₂ emissions; the copper foil business, which is the second largest CO₂ emitter; the catalyst business, where changes in the business environment due to climate change are comparatively large; the engineered powders business; the PVD materials business; the ceramics business; and NIPPON YTTRIUM CO.,LTD. We will continue to analyze other business segments and update those completed previously on a periodic basis.

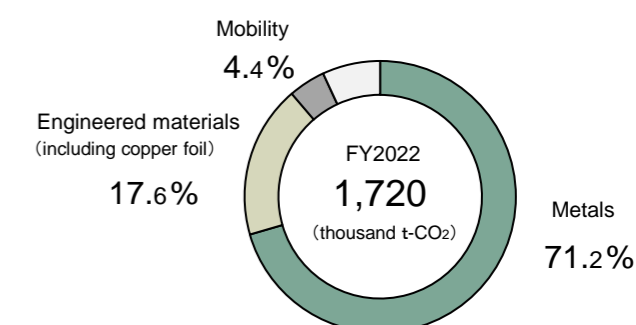
In the scenario analysis, we considered plans to minimize the decline in earnings due to each risk and to capture opportunities through the creation of new products and new businesses. Many of these measures should be addressed from a long-term perspective, and they are also incorporated into our medium-term management plan starting in FY2022 to secure a resilient business.

In particular, in the Metals Sector, based on the scenario analysis performed in FY2020, we have made CO₂ emission reduction our top priority and launched a carbon neutral response preparation project. In this project, we examine CO₂ reduction measures, rank them according to effectiveness and certainty, and incorporate them into the 22 medium-term management plan.

Scenario definition

Assumed period	2030s	
Scenario definition	4°C scenario	2.7 - 4.0 °C higher than pre-Industrial Revolution levels by the end of 21st century. * Uses data mainly from the STEPS (Stated Policies Scenario) of the IEA (International Energy Agency).
	2°C scenario	0.9 - 2.3°C higher than pre-Industrial Revolution levels by the end of 21st century. * Uses data mainly from the APS (Announced Pledges Scenario) and partly from the NZE (Net Zero Emissions by 2050 Scenario) of the IEA.

Breakdown of CO₂ emissions



* Details of the breakdown for each business are on page 143.

Summary of scenario analysis results for the Engineered Materials Businesses

(excluding copper foil *1, performed in FY2022)

Impact estimation items	Risks	Opportunities	4°C	2°C	Countermeasures
Sales	<ul style="list-style-type: none"> Decline in sales of product lines that focus on low carbon emissions, caused by the emphasis on low cost over environmental contribution under the 4°C scenario 	<ul style="list-style-type: none"> Increase in sales of electronic components and related materials due to growth in demand for EVs Growth in recycled products and related markets due to increased recycling awareness 	Loss ▼▼	Profit ▲	<ul style="list-style-type: none"> Customer trust acquisition by promoting low GHG emission production Expand sales to users in Japan and overseas Product development to reduce CO2 emissions Enhance response to market needs, such as recycling and reuse requests Consolidate production sites and optimize raw material inventory levels
Carbon tax and energy cost changes	<ul style="list-style-type: none"> Significant cost increase due to introduction of carbon taxes Increase in operating costs due to higher energy prices 	—	▼▼	▼▼	<ul style="list-style-type: none"> Improve production efficiency through yield improvement Reduce electricity intensity through introduction of energy-saving equipment and technologies Convert fossil fuel-powered equipment to electric-powered ones Utilize carbon credits
Changes in raw material prices	<ul style="list-style-type: none"> Cost increase due to higher prices of chemicals and materials resulting from rising energy prices, and higher metal prices 	—	▼▼	▼▼	<ul style="list-style-type: none"> Reflect raw material price increases/decreases in selling prices Application of recycled raw materials and higher proportion of recycled materials Reduce raw materials used for products Multi-sourcing of raw materials

* 1 For the four businesses: Engineered Powders, PVD Materials, Ceramics, and NIPPON YTTRIUM CO.,LTD.

The summary of scenario analysis results for the copper foil business and the catalyst business performed in FY2021 is available at the link below.
https://www.mitsui-kinzoku.com/Portals/0/CSR/integrated_report/2022/EN01/13_integrated_report2022.pdf

The summary of scenario analysis results for the metals business performed in FY2020 is available at the link below.
https://www.mitsui-kinzoku.com/Portals/0/CSR/integrated_report/2021/EN/15_integrated_report2021.pdf

Metrics and targets TCFD

Medium- and long-term CO2 emissions reduction targets

In March 2022, Mitsui Kinzoku Group revised its medium-term and long-term CO2 emissions reduction targets for energy-derived CO2 emissions in Scope 1 and 2. To achieve these targets, we promote energy-saving activities, increase renewable energy use, as well as create environmental contribution products and develop innovative technologies actively.

Medium-term CO2 emissions reduction target

Reducing CO2 emissions by 38% globally by FY2030 (compared to the FY2013 level)

Long-term CO2 emissions reduction target

Achieving carbon neutrality (net zero emissions) by FY2050

Carbon Neutral Road Map

Mitsui Kinzoku Group has formulated a Carbon Neutral Road Map (CNRM) to achieve its medium- and long-term CO2 emissions reduction targets. In order to achieve carbon neutrality by 2050, it is necessary for management to make climate-related investments that take into account social and technological trends, as well as the company's situation. We consider the CNRM as an important mechanism to support flexible and timely decision-making on these investments.

To develop investment programs eligible for the CNRM, the Executive Council deliberates investment plans as necessary to make decisions. Such deliberations are based on activity details and implementation plans submitted by business divisions and subsidiaries with the support of the business sectors. Implementation results are also monitored to develop further CO2 emission reduction programs.

Internal Carbon Pricing System

Mitsui Kinzoku Group introduced an Internal Carbon Pricing (ICP) System in FY2023 to increase investment in CO2 emission reduction activities through CNRM operation, as well as to promote new business creation that contributes to a decarbonized society. We determined our internal carbon price taking into account a comprehensive approach that includes identification of CO2 emission reduction measures, strategic considerations based on the TCFD scenario analysis, and the external environment related to climate change. We set the price by scope because the difficulty of implementing emission reduction measures in our Group vary greatly due to different characteristics of Scope 1 and 2.

Summary of the Mitsui Kinzoku Group's ICP system

Internal carbon price	Scope1: 30,000yen/t-CO2 Scope2: 20,000yen/t-CO2
	※ Set a higher price for Scope 1 than 2 in order to further promote measures for Scope 1, where emission reduction is more critical and challenging.

Applicable objectives	Equipment/development investments accompanying changes in CO2 emissions
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Application	CO2 emissions from planned equipment/development investments are measured using the ICP, which are then converted to cost and referred to in investment decision-making.
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Effective date April 1, 2023

Promoting energy conservation activities

We have been working on energy conservation activities, including operational improvements in each process, such as further energy efficiency improvements in production activities, as well as the introduction of advanced equipment. We have also incorporated programs of energy conservation in our CNRM.

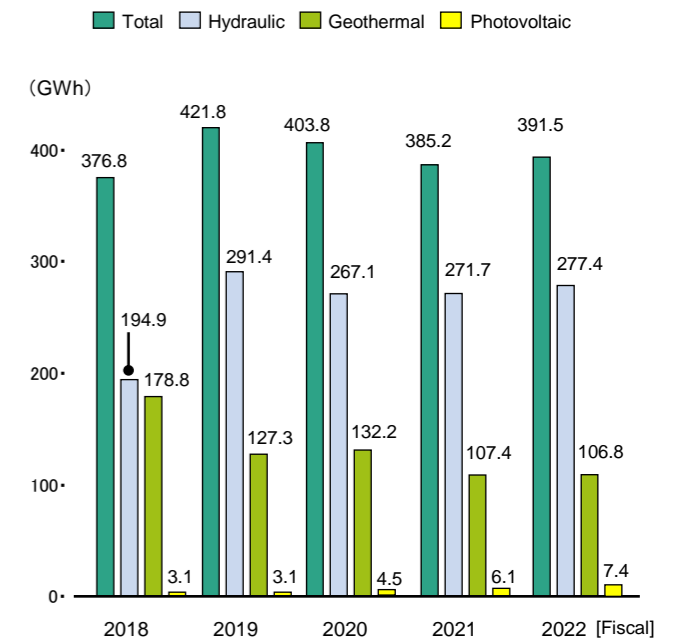
In FY2022, Taiwan Copper Foil Co., Ltd. achieved a 1.6 GWh reduction at its plant by updating refrigeration and air conditioning equipment in the copper foil production process.

Increasing the use of renewable energy

In order to increase the ratio of renewable energy, we are expanding the introduction of new renewable energy generation facilities as well as operating existing hydroelectric, solar, and other power generation facilities stably. We are also working to procure electricity derived from renewable energy sources.

At GECOM Corporation, Mitsui Kinzoku ACT Corporation's main base in North America, 63% of the electricity purchased in FY2022 was hydroelectric power, which was an increase of 20 percentage points from FY2021. At the Ageo Plant, the main domestic plant of the Copper Foil Division, 30% of the electricity used in FY2022 was from renewable sources. We will continue to increase our purchase of renewable energy-derived power.

Total power generation using renewable energy



Participation in GX League

The GX (Green Transformation) League is a Japanese government initiative to promote GX, which has been working in earnest since FY2023. In the GX League, companies collaborate with government agencies, universities, public research institutions, and financial institutions to discuss economic and social system reform as a whole and to seek to create new markets.

Through our public-private-academic collaboration in the GX League, we will work with stakeholders in our value chain and participate in green markets to achieve our medium- and long-term CO2 emissions reduction targets.

CO2 emissions results

Mitsui Kinzoku Group has been improving energy consumption per unit of production through energy conservation activities and increased use of renewable energy. As a result of fluctuations in energy consumption due to variations in production volume, CO2 emissions have increased or decreased. The increase in total emissions for the Group after FY2020 is due to the consolidation of Hibi Smelter. In FY2022, while sales increased over the previous year, the amount of CO2 emissions from energy consumption decreased. To achieve our medium- and long-term targets, we review our actions while checking our progress.

Scope 3 emissions calculations

Mitsui Kinzoku Group recognizes that reducing GHG emissions in the value chain, including raw materials used in manufacturing processes, transportation of raw materials, as well as use and disposal of products, is one of the most important measures for addressing climate change.

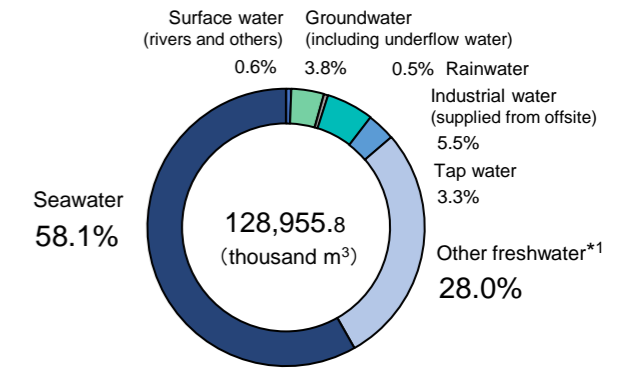
Therefore, we have started to calculate Scope 3 emissions to identify and reduce GHG emissions throughout the value chain. Trial calculations were started for the Ageo Plant of the Copper Foil Division from the second half of FY2021, and since the second half of FY2022, calculations have been underway at all domestic sites.

Appropriate use and management of water

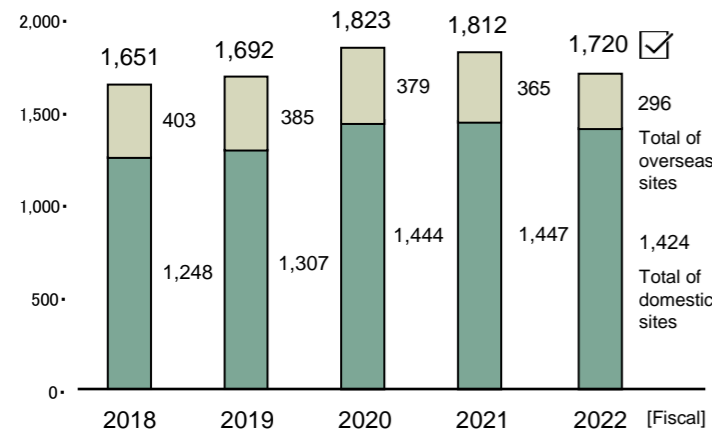
Water is an essential resource of the earth and essential to the production process of our Group. The Mitsui Kinzoku Group's Environmental Action Plan calls for appropriate management of water intake, wastewater discharge, and wastewater quality at each site. We are committed to making proper use of water resources and conserving the aquatic environment, as well as reducing water use and recycling.

At our manufacturing sites, we monitor water use, wastewater discharge, and reuse/recycling volumes to ensure efficient water use. In particular, at smelting sites that use a large amount of water, we promote the reuse of ore dressing water and cooling water, as well as the use, reuse, and recycling of seawater and rainwater.

Breakdown of water withdrawal (FY2022)



CO2 emissions from energy consumption (thousand t-CO2)

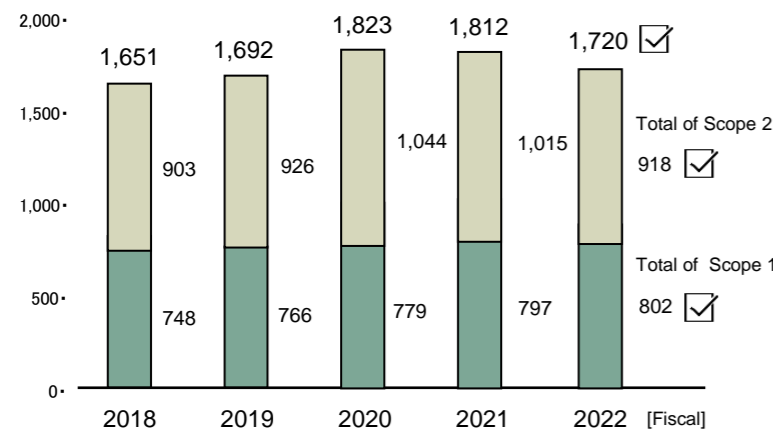


* Figures for CO2 emissions from energy consumption were calculated using emission factors derived in a manner conforming to the Act on Promotion of Global Warming Countermeasures. CO2 emissions from purchased electricity in Japan were calculated using the latest adjusted emission factors of electric power suppliers (basic emission factors were used until FY2019). For overseas emission factors, we used the per-country emission factors, the CO2 Emission Factors from Electricity for 2021 reported by IEA (Until FY2020, the Electricity Emission Factors reported by GHG PROTOCOL were used).

* We have received an independent practitioner's assurance for the figures for FY2022 in this information to which is attached.

CO2 emissions from energy consumption (Breakdown by scope)

(thousand t-CO2)



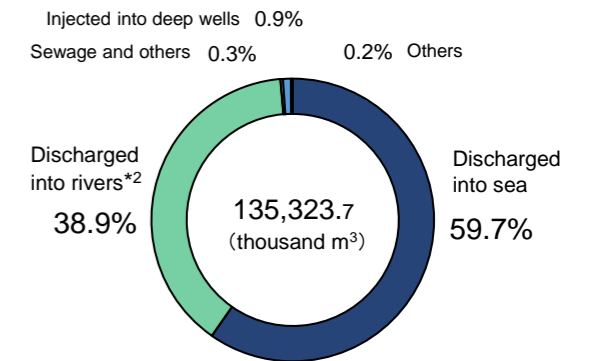
Reduction of water pollutants

Each manufacturing site monitors the status of its wastewater, including BOD and COD, which indicate the amount of organic matter in the wastewater, under stricter voluntary standards to ensure compliance with laws, regulations and ordinances. Mitsui Kinzoku Group also collects and manages the monitoring results from each site on a group-wide basis as well as shares emission reduction efforts and technologies.

Survey of water stressed areas and impacts on business

Mitsui Kinzoku Group uses World Resources Institute (WRI)'s AQUEDUCT Water Risk Atlas to assess water withdrawals in water-stressed areas for each manufacturing site in Japan and overseas. In the assessment, the sites with water stress rated as Extremely High (>80%) or High (40-80%) are primarily auto component manufacturing plants located in Morocco, Mexico, India, and China. The total freshwater withdrawals of these sites represent approximately 0.1% of the Group's total and the impacts on operations are considered manageable. We will continue monitoring and work to conserve water resources and minimize the impact on our business.

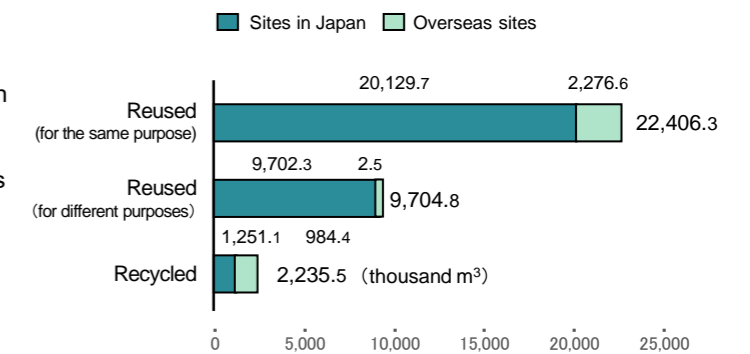
Breakdown of wastewater (FY2022)



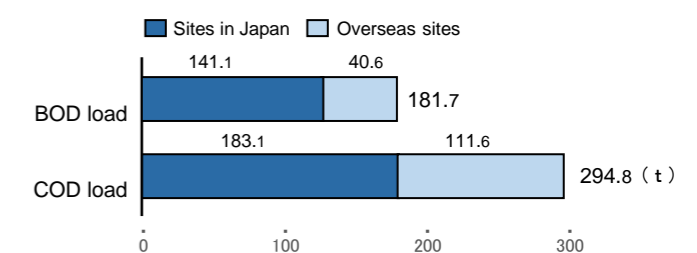
*1 Other freshwater includes spring water generated from mines in domestic mining areas (23,457.3 thousand m³, 18.2% of total water withdrawal).

*2 Wastewater discharged into the river includes spring water that is not used for production purposes and is discharged into the river under the control of the Group.

Amount of circulated water usage (FY2022)



Emissions to the water (FY2022)



Toward a Circular Economy

Along with global economic growth, demand for resources and energy is expanding. As a result, the amount of waste is increasing and environmental problems are becoming more serious. Accordingly, there is a growing need to shift from the conventional Linear Economy based on mass-production, mass-consumption, mass-disposal to a Circular Economy over the medium to long term. Mitsui Kinzoku Group is committed to effective use of resources, reduction of waste and environmental pollutants, as well as introduction of environmental contribution products to meet the demands of society and achieve sustainable growth.

Resource recycling

Mitsui Kinzoku Group strives to manufacture products by recycling waste and other recycled raw materials in order to make effective use of resources.

In the nonferrous smelting business, we have been recovering zinc, lead, and other metals from waste, and supplying nonferrous metal products as essential raw materials for industry. This represents our effort to contribute to resource recycling while promoting our business development. Mitsui Kinzoku Group has established its own recycling network that organically links its smelters for synergy effects. Toward the transition to a circular economy, we are now working to build a more advanced recycling network to expand the use of recycled raw materials and improve processing ability for difficult-to-refine raw materials. To this end, we are advancing separation and purification technologies according to materials, as well as improving technologies in our manufacturing processes.

The Environmental Action Plan includes group-wide efforts to increase the use of reused and recycled raw materials.

Waste reduction

Each manufacturing site of the Group strives to reduce waste through minimization and efficiency of resources used. We work to reduce the final disposal volume by improving the recovery rate of valuable resources, promoting the 3Rs of packaging materials, and improving the yield rate of manufacturing processes. The Environmental Action Plan calls for setting a Waste Intensity Target at each site and group-wide efforts to reduce waste generation.

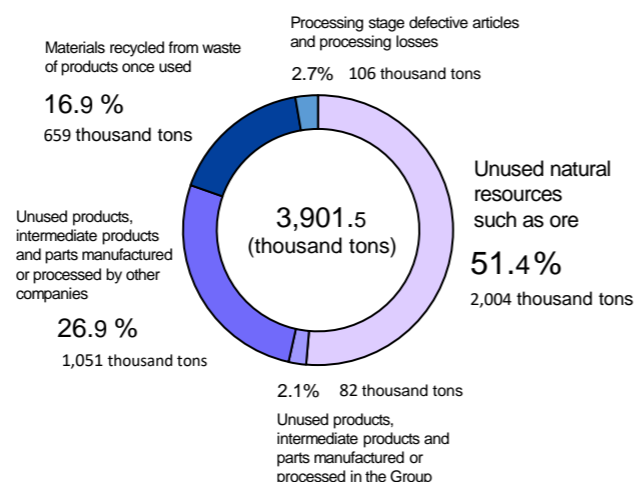
Of the amount of byproducts in FY2022, 86% within Japan and 98% overseas were recycled and used either within or outside of our Group.

Plastic recycling

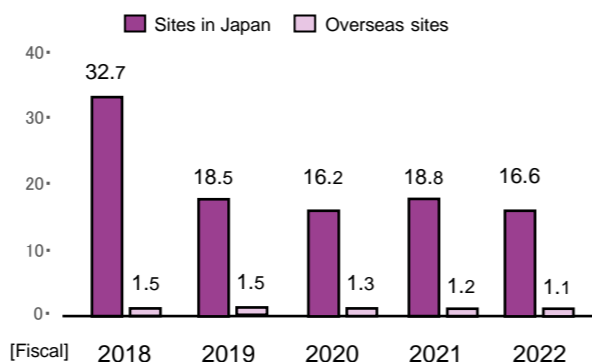
Mitsui Kinzoku Group is committed to proper disposal of plastic waste and resource recycle in response to the increasingly serious environmental impact of plastic waste worldwide.

In FY2022, in order to reduce plastic waste and promote resource recycling, based on the actual conditions of plastic use and disposal in each site, we set targets for reducing plastic emissions and raising the recycling rate in accordance with the Plastic Resource Circulation Act. Targeting the domestic group, which accounts for about 95% of the total emissions, we have set a target of reducing emissions by 200 tons to 2,044 tons and a recycling rate of 39% toward FY2024, with FY2021 as the base year.

Breakdown of usage by type of raw material (FY2022)

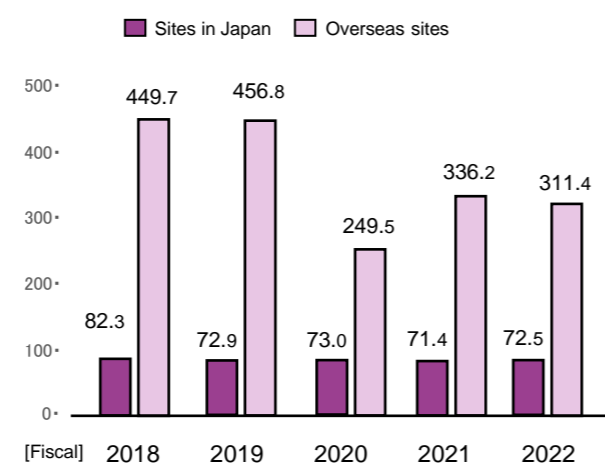


Amount of waste generation (thousand tons)



* Waste generation excluding reuse, recycling and heat utilization.
* In this year's report, waste generation and tailings waste generation are separated and reported individually.

Amount of tailings waste generation (thousand tons)



* Available from this year's report.

Plastic waste reduction targets*

	Baseline year FY2021	Reporting year FY2022	Target year FY2024
Emissions (thousand t)	2.2	2.1	2.0
Recycling rate	33%	30%	39%

* Covers the scope of domestic consolidation, including Mitsui Kinzoku and domestic consolidated subsidiaries.

In manufacturing processes that use plastic materials, we are reducing both usage and emissions by improving yield rates. We are also working to switch to other materials such as metals and paper. In packaging materials, we are promoting the 3Rs and shifting to other materials. In addition, we are introducing new equipment to convert waste that was previously disposed of into valuable materials that can be reused and recycled. Moreover, we are pursuing ICT-enabled approaches for visualizing waste data and increasing work efficiency as well as considering adopting new reduction measures. In the Ageo area (Ageo City, Saitama Prefecture) and Miike area (Omuta City, Fukuoka Prefecture), we have also started reduction activities through collaboration among sites.

Reduction of chemical substance emissions

Each manufacturing site of the Group files the release and the transfer amount of chemical substances to the government under the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Law concerning Pollutant Release and Transfer Register [PRTR]). The management of hazardous chemical substances contained in products has become an essential requirement. We also respond to the guidelines for chemical substances contained in products, such as the RoHS Directive and the REACH regulations required by customers.

We aim to reduce the emission amount of environmental pollutants in accordance with the Environmental Action Plan, including our overseas sites. We continuously strive to collect and replace chemical substances that may cause environmental pollution. Thus we focus on reducing and removing use of such chemical substances from our products.

Prevent air pollution

Mitsui Kinzoku Group monitors sulfur oxides (SOx), nitrogen oxides (NOx), and soot and dust emissions into the atmosphere at each manufacturing site and facility according to stricter voluntary standards in accordance with laws and regulations.

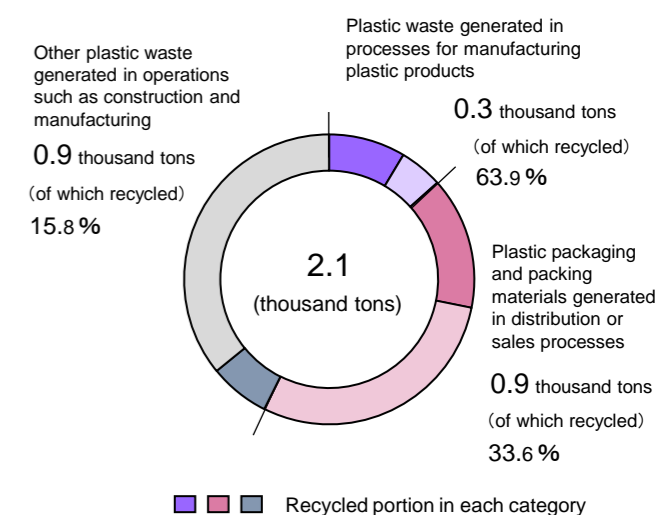
SOx is generated during the combustion of sulfur-containing fossil fuels such as oil and coal, and NOx from combustion equipment such as boilers and incinerators. We also collect and manage these monitoring results from each site across the Group and share emission reduction efforts and technologies.

Environmental Contribution Product

In order to achieve a carbon neutral society, including our operations, and to realize a recycling-based society, we recognize that it is essential to create and develop products and businesses that contribute to the reduction of environmental impact in response to the social demands. In accordance with this, we evaluate the environmental impact of our products at each stage of their life cycle from the perspective of life cycle assessment (LCA), and define products that lead to the reduction of environmental impact and mitigation of social issues as Environmental Contribution Product. In FY2020, we started to operate a system to certify the environmental contribution products in our Group.

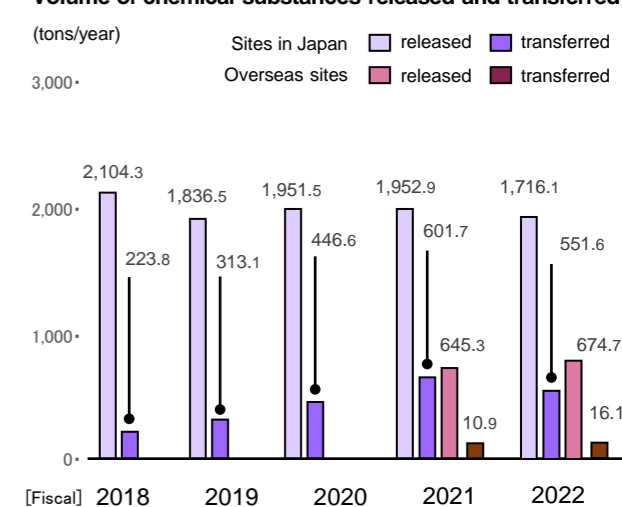
Amount of plastic waste generated (FY2022)*

Breakdown and percentage of recycling



* Covers the scope of domestic consolidation.

Volume of chemical substances released and transferred



* Revised the values for FY2021 disclosed last year.
* Added the amounts of overseas sites from FY2021.

Emissions to the atmosphere (FY2022)

